

Determination of Public Land (Rangeland) Health for 64067 CHESSER RANCH INC

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the Chesser Ranch allotment #64067 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ T. R. KREAGER

Assistant Field Manager

09/29/2004

Date

Standards of Public Land Health

Evaluation of 64067 CHESSER RANCH INC Allotment

[07/09/2004]

The Roswell Field Office conducted rangeland health assessments at 3 study sites within the Chesser Ranch Inc. allotment #64067. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64067-BRENDA-F202	X	*		X	*		N/A		
64067-EAST-F204	X			X			N/A		
64067-NORTH-F203	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the public land on the Chesser Ranch allotment #64067. Ten (10) of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 3 trend plot locations within the allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections which were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 years.

This allotment is located Southwest of Roswell, NM. The general topography is low rolling hills bisected by drainages. The major drainage is Made Draw. The primary ecological sites present within this area are Shallow SD-2, Very Shallow CP-3, both occur on the ridges and side slopes and; Loamy SD-3 and Draw SD-3 sites that occur in the drainages and bench areas above the drainages.

The dry conditions occurring over the last several years have impacted this allotment and surrounding area. The public land is in the southern portion of the allotment. Three study areas were assessed on this allotment, each one corresponding to a different pasture.

Brenda pasture is situated in the southwest part of the allotment. The primary ecological site is a Shallow SD-3. All indicators rated from moderate to none to slight. The indicators rated as moderate include soil surface resistance to erosion, soil surface loss or degradation, functional/structural groups, litter amount, annual production and invasive plants. All of these indicators are influenced by climatic conditions. The prior three (3) year for annual precipitation is about 54% of normal and 45% of normal for the growing season. This area received less precipitation to date this year than the other areas. This year's conditions have significantly improved from December 2003 when the latest monitoring data was collected. Annual production has increased to 250-300 lbs/acre; this will increase litter amount and decrease bareground and promote improvement in soil and hydrologic conditions. There has been a shift in the expected functional/structural plant groups; although the grama grass groups are present the site is dominated by other grasses with tobosa and burrograss being dominant. With a return of normal precipitation and a continuance of current management a reversal in this trend may be expected. Invasive plants, primarily creosote are scattered on the upper ridges and at this time do not pose a significant concern.

The loamy drainages that bisect the hills are significantly well vegetated with the major plant groups expected on a loamy site. These drainages feed into Made Draw. The narrow bottoms of these draws are classified as a Draw SD-3 ecological site supporting the vegetation expected for this site. The draw bottoms are well vegetated; this acts to slow runoff, trap sediment and increase infiltration.

East pasture is located in the southeast portion of the allotment. Only invasive plant rated as moderate, all other indicators rated as slight-moderate to none to slight. Invasive plants, primarily creosote are scattered on the upper ridges and at this time do not pose a significant concern. The area has received more precipitation this year but the annual and growing seasons average are the same as described above.

The loamy drainages that bisect the hills are significantly well vegetated with the major plant groups expected on a loamy site. The narrow bottoms of these draws are classified as a Draw SD-3 ecological site supporting the vegetation expected for this site. In some of the larger drainages shallow head cutting is occurring. These areas are small at present and are well vegetated both above and below the head-cut. The draw bottoms are well vegetated; this acts to slow runoff, trap sediment and increase infiltration.

The North pasture is located in the east central portion of the allotment and has the smallest tract of public land. Annual production and invasive plant indicators rated as moderate; all other indicators rated as slight to moderate and none to slight. This study area is classified as a Loamy SD-3 ecological site; however, it is located on the upper reaches of the loamy inclusion and is influenced by the shallow sites surrounding it. The area has received more precipitation this year but the annual and growing seasons average are the same as described above. Invasive plants, primarily creosote are scattered on the upper ridges and at this time do not pose a significant concern. Annual production is estimated at 40-60% of expected normal production for this site however, current annual production of the true loamy bottoms in this area is greater. Some small rills are

occurring in association with some two track roads that go up the slopes. Most of these are well vegetated and pose no problems.

The main portion of Made Draw is located in this pasture but is located on private and state lands; vegetative composition is typically that that is described in the Draw SD-3 ecological site.

Hydrology - Pasture Brenda - Soil surface resistance to erosion rated in the moderate category. Organic matter is lacking on this site, but this is expected for an area that has a small amount of litter present. The soil surface loss or degradation has rated out as moderate. The recent dry conditions, decrease in the strength of physical crusts and or absence of soil crusts, wind velocity, surface dryness, and the decreased amount of surface plant cover has possibly increased soil surface loss to degradation. The litter amount rated in the moderate category. The decrease in litter amount suggests that the dry conditions have had a negative affect on the growing conditions which decreases the amount of litter that is produced. All other indicators rated as none to slight or slight to moderate which shows a healthy ecological condition. Sand and gravel deposits of Quaternary alluvial outcrop in the area.

Pasture East - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial outcrop in the area.

Pasture North - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial outcrop in the area. Limestone rocks of the San Andres Formation outcrop in the area.

Wildlife/Biotic - Evaluation of the integrity of the biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as functional/structural groups and plant mortality & decadence, as described above. In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation.

The Brenda pasture had five biotic indicators that fell within the Moderate rating and are the Soil Surface loss and Degradation, Functional/Structural Groups, Litter Amount, Annual Production and Invasive Plants. Considering past and present climatic conditions, these indicators can be expected to fall within the normal range of variability, as the area

of interest falls within an ecotone between the Chihuahuan desert and grasslands biomes, the desert shrub community can be expected in the area and would increase with declining range site conditions and the overall drying conditions over time.

The East pasture had one indicator rated as moderate with all other indicators rated as slight moderate or lower. This was invasive plants. Invasives will continue to increase once established, along with the influence of the desert community and drought conditions.

The North Pasture had annual production and again invasive plants as Moderate. Annual production can be expected to fall within this range.

Wildlife habitat and populations indicators rated indicators rated Slight to Moderate primarily for, primarily for pronghorn antelope, desert mule deer, upland game birds, and a variety of non-game terrestrial species. The composition of vegetation reflects current climatic conditions (drought) and the area is being within an ecotone between the Chihuahuan desert and the grasslands. Range site production and cover a variety of preferred species for wildlife such as forbs and woody browse species, and the availability of seed for food and plant regeneration, is moderated by climate and land use. The voluntary non-use that was taken this grazing year along with spring moisture has enhanced rangeland conditions.

It is the professional opinion of the Assessment Team that the public land within the Chesser Ranch Inc. allotment meets the Upland and Biotic standards. There are no public land Riparian issues present, therefore this standard was not addressed. See site notes and recommendations for further information regarding the assessments on these ecological sites.

Recommendations:

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64067-BRENDA-F202						
Legal Land Desc	SWSE 9 0140S 0220E Meridian 23		Acreage		3892	
Ecosite	042CY025NM SHALLOW SD-3		Photo Taken		Y	
Watershed	13060009040 FELIX					
Observers	SPAIN/NAVARRO		Observation Date		08/20/2004	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	Lt		Soil Taxon Name		LOZIER	
Texture Class	NM666 GRV-L		Soil Phase		LOZIER-TENCEE	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.37		NOAA Growing Season Precipitation		4.24	
NOAA Avg Annual Precipitation	11.8		NOAA Avg Growing Season Precipitation		9.61	
Disturbances and Animal Use:	sheep herd grazing pasture					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :	Short and stable					
S H	Pedestals and/or Terracettes				X	
Comments						

:						
S H	Bare Ground				X	
Comments :	At uper end of range					
S H	Gullies					X
Comments :						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :						
H	Litter Movement				X	
Comments :						
S H B	Soil Surface Resistance to Erosion			X		
Comments :	Low moderate in inter-spaces					
S H B	Soil Surface Loss or Degradation			X		
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :						
S H B	Compaction Layer					X
Comments :						
B	Functional/Structural Groups			X		
Comments :	Gramagrass species are present but less that expected. Tobosa andburrograss are increasing throughout the site; this is possibily due the the last few years drought condition.					
B	Plant Mortality/Decadence					X
Comments :						
H B	Litter Amount			X		

Comments :	Due to low production last growing season but is on the increase this year.					
B	Annual Production			X		
Comments :	This years production is estamated at 300+ lbs/acre.					
B	Invasive Plants			X		
Comments :	Creosote primarily and concentrated on the ridge tops.					
B	Reproductive Capability of Perennial Plants					X
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Physical crust with breaks					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur					
B	Special Status Species Populations					X
Comments :	None known to occur					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight

S	Soil	0	0	2	4	4
H	Hydrologic	0	0	3	5	3
B	Biotic	0	0	6	2	5

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	3	8
Biotic	The biotic indicators have been affected by the droughty conditions but are improving with the moisture that the area recieved this spring and summer.	0	6	7

Site Notes: Need to reset the 3x3 trend plot.

The area is primarily low rolling hills (Shallow SD-3 ecological site) bisected with drainages and swales (Loamy SD-3 ecological site). Vegetative diversity is good grasses include tobosa, three awns, blue grama, black grama, burrograss, slim tridens, rough tridens; forbs include filaree, croton, buckwheat and aster species; shrubs include creosote, snakeweed, cholla, feahter dalea and skunkbush in the drainages.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64067-EAST-F204

Legal Land Desc	NWSW 12 0140S 0220E Meridian 23	Acreage	1287
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060009040 FELIX		
Observers	SPAIN/NAVARRO	Observation Date	08/20/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Lt	Soil Taxon Name	LOZIER
Texture Class	NM666 GRV-L	Soil Phase	LOZIER- TENCEE
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.37	NOAA Growing Season Precipitation	4.24
NOAA Avg Annual Precipitation	11.8	NOAA Avg Growing Season Precipitation	9.61
Disturbances and Animal Use:	Thirty (30) cow/calf pairs graing the pasture.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :	Short and stable					
S H	Pedestals and/or Terracettes				X	
Comments						

:						
S H	Bare Ground				X	
Comments :						
S H	Gullies				X	
Comments :	Gullies are present only in the drainages which are loamy sites and are well vegetated; slight active headi cutting is occurring in some areas.					
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments :						
H	Litter Movement				X	
Comments :						
S H B	Soil Surface Resistance to Erosion				X	
Comments :						
S H B	Soil Surface Loss or Degradation				X	
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments :						
S H B	Compaction Layer					X
Comments :						
B	Functional/Structural Groups				X	
Comments :						
B	Plant Mortality/Decadence					X
Comments :						
H B	Litter Amount				X	
Comments						

:						
B	Annual Production				X	
Comments						
:						
B	Invasive Plants			X		
Comments	Scattered creosote on some ridge tops.					
:						
B	Reproductive Capability of Perennial Plants					X
Comments						
:						
S	Physical/Chemical/Biological Crusts				X	
Comments	Primarily physical crust.					
:						
B	Wildlife Habitat				X	
Comments						
:						
B	Wildlife Populations				X	
Comments						
:						
B	Special Status Species Habitat					X
Comments	None known to occur.					
:						
B	Special Status Species Populations					X
Comments	None known to occur.					
:						
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	8	2

H	Hydrologic	0	0	0	8	3
B	Biotic	0	0	1	7	5
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	1	12		
<p>Site Notes: The area is primarily low rolling hills (Shallow SD-3 ecological site) bisected with drainages and swales (Loamy SD-3 ecological site). Vegetative diversity is good grasses include tobosa, three awns, blue grama, black grama, sideoats grama, burrograss, slim tridens, rough tridens; forbs include filaree, croton, buckwheat and aster species; shrubs include creosote,snakeweed,cholla,feahter dalea, yucca and skunkbush in the drainages.</p>						

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64067-NORTH-F203

Legal Land Desc	SESE 25 0130S 0220E Meridian 23	Acreage	726
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060007030 ZUBER		
Observers	SPAIN/NAVARRO	Observation Date	08/20/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Lt	Soil Taxon Name	LOZIER
Texture Class	NM666 GRV-L	Soil Phase	LOZIER- TENCEE
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.37	NOAA Growing Season Precipitation	4.24
NOAA Avg Annual Precipitation	11.8	NOAA Avg Growing Season Precipitation	9.61
Disturbances and Animal Use:	Fifty (50) head of sheep grazing the pasture.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :	Some small rills occurring on two track roads where the road goes up the slopes; but these are generally well vegetated.					
S H	Water Flow Patterns				X	
Comments :	Short and stable					
S H	Pedestals and/or Terracettes				X	

Comments :						
S H	Bare Ground				X	
Comments :						
S H	Gullies					X
Comments :						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :						
H	Litter Movement				X	
Comments :						
S H B	Soil Surface Resistance to Erosion				X	
Comments :						
S H B	Soil Surface Loss or Degradation				X	
Comments :	Inter space soils slow to melt					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :						
S H B	Compaction Layer					X
Comments :						
B	Functional/Structural Groups				X	
Comments :	Grama grass groups are lower than expected.					
B	Plant Mortality/Decadence					X
Comments :						
H B	Litter Amount				X	

Comments :						
B	Annual Production			X		
Comments :						
B	Invasive Plants			X		
Comments :	Scattered cresote					
B	Reproductive Capability of Perennial Plants					X
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Primarily physal crusts but scattered patches of biological crusts are present.					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur					
B	Special Status Species Populations					X
Comments :	None known to occur					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight

S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	8	3
B	Biotic	0	0	2	6	5

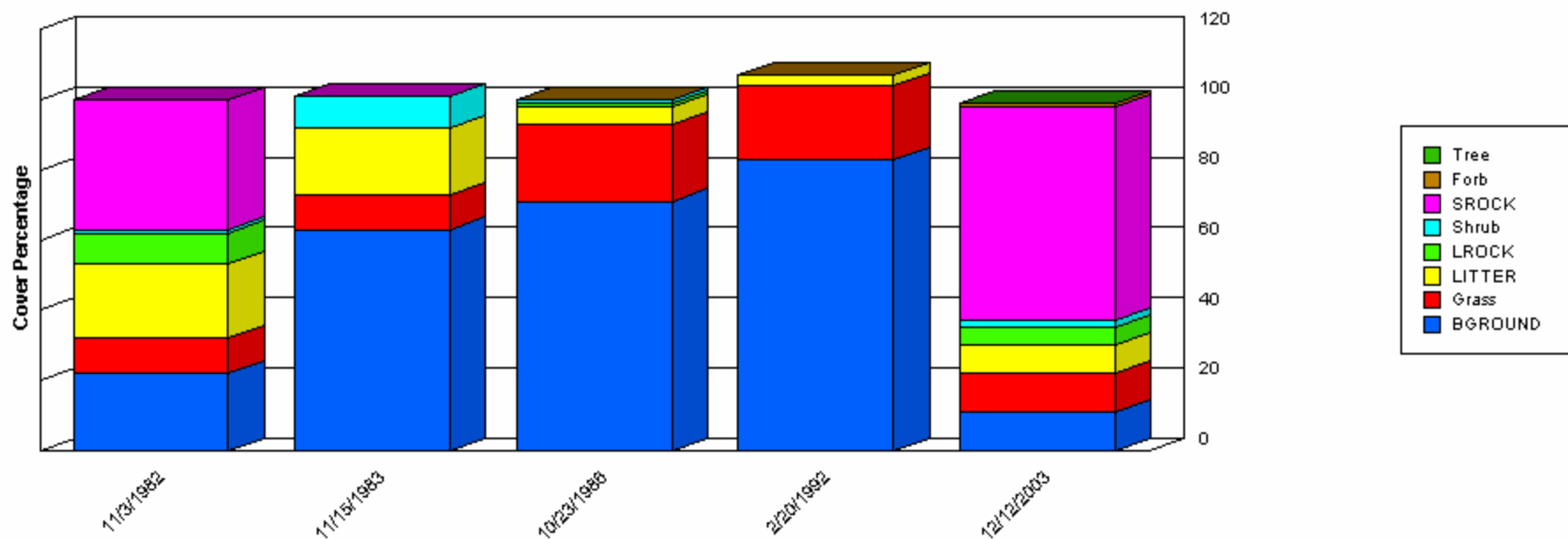
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	2	11

Site Notes: The area is primarily low rolling hills (Shallow SD-3 ecological site) bisected with drainages and swales (Loamy SD-3 ecological site). The key area study is located in the upper reaches of a loamy inclusion which appears to be within a transitional zone between the shallow and loamy sites.

Vegetative diversity is good grasses include tobosa, three awns, blue grama, black grama, sideoats grama, burrograss, muhlys, slim tridens, rough tridens; forbs include filaree, croton, buckwheat and aster species; shrubs include creosote, snakeweed, cholla, feachter dalea, yucca and skunkbush in the drainages.

Ground Cover Trends



	11/3/1982	11/15/1983	10/23/1986	2/20/1992	12/12/2003
BGROUND	22.00	63.00	71.00	83.00	11.00
Forb	0.00	0.00	0.00	0.00	1.00
Grass	10.00	10.00	22.00	21.00	11.00
LITTER	21.00	19.00	5.00	3.00	8.00
LROCK	9.00	0.00	1.00	0.00	5.00
Shrub	1.00	9.00	1.00	0.00	2.00
SROCK	37.00	0.00	0.00	0.00	61.00

	11/3/1982	11/15/1983	10/23/1986	2/20/1992	12/12/2003
Tree	0.00	0.00	0.00	0.00	0.00
Total	100.00	101.00	100.00	107.00	99.00

Report Parameters

SITE NAME LIKE 64067-BRENDA-F202
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

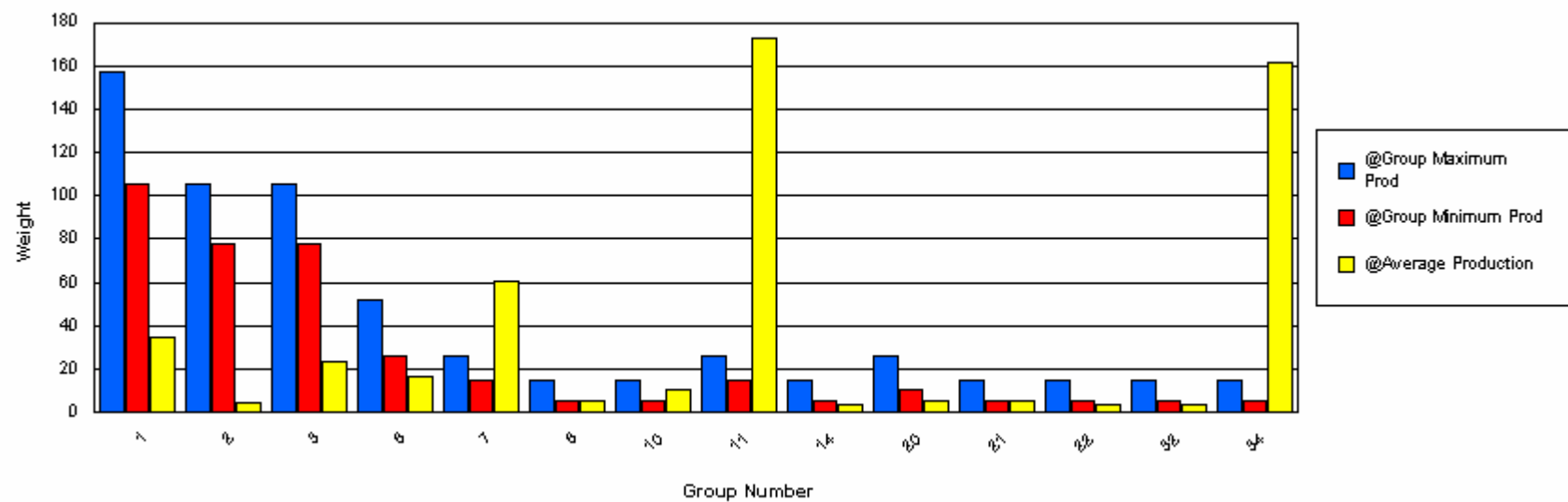
Functional / Structural Groups

Report Parameters

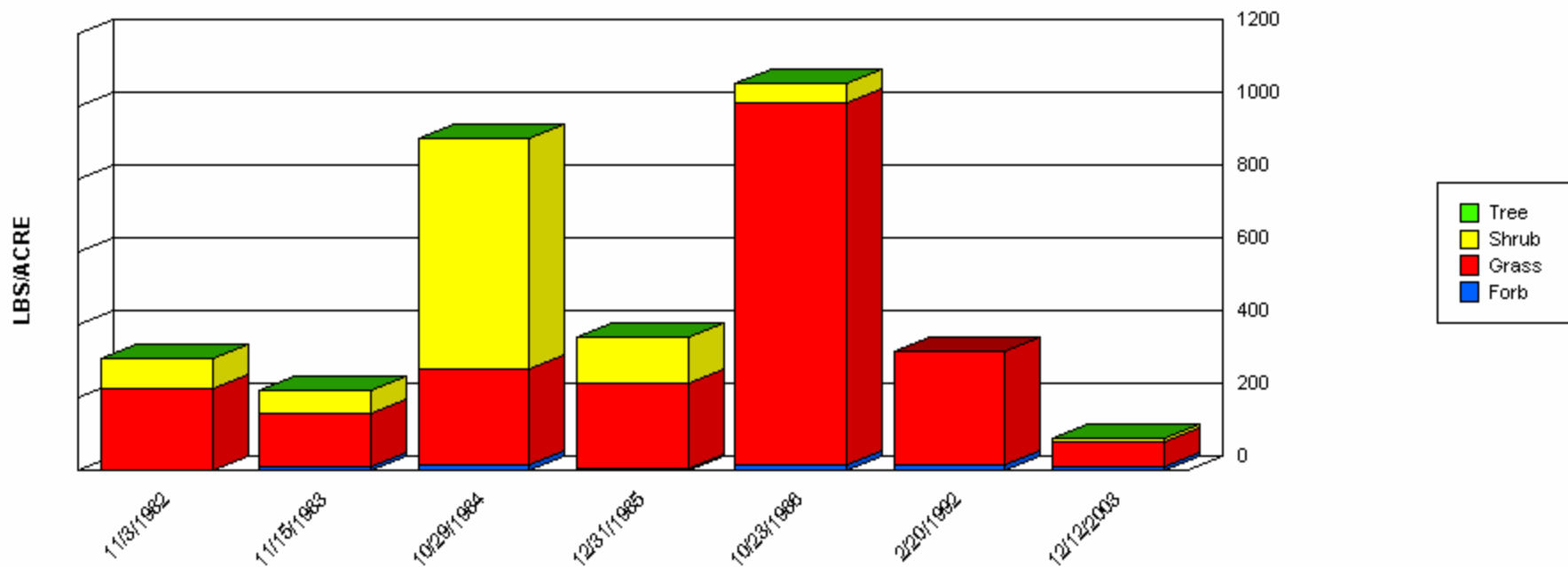
SITE NAME LIKE 64067-BRENDA-F202
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	0.00	88.00	34.14	28.10
2	Grass	BOCU	78	105	0.00	8.00	4.00	4.00
3	Grass	BOGR2	78	105	0.00	74.00	23.33	24.96
6	Grass	SPCR	26	52	0.00	53.00	16.67	19.01
7	Grass	TRMU	15	26	0.61	108.00	41.23	37.18
7	Grass	TRPI2	15	26	0.00	64.00	19.33	21.50
8	Grass	MUAR	5	15	0.00	29.00	5.57	9.77
10	Grass	ERPU8	5	15	0.00	38.00	10.57	12.95
11	Grass	ARIST	15	26	0.00	196.00	62.14	59.76
11	Grass	HIMU2	15	26	0.00	228.00	68.55	72.34
11	Grass	MUAR2	15	26	0.00	109.00	31.71	33.28
11	Grass	PAOB	15	26	0.00	7.00	2.33	3.30
11	Grass	SCBR2	15	26	0.00	21.00	8.36	6.82
14	Grass	LYPH	5	15	0.00	1.00	0.17	0.37
14	Grass	PAHA	5	15	0.00	1.00	0.50	0.50
14	Grass	SPAI	5	15	0.00	5.00	2.50	2.50
20	Forb	CROTO	10	26	0.00	13.00	5.09	5.14
21	Forb	AAFF	5	15	0.38	18.00	5.48	6.44
21	Forb	DYPE	5	15	0.00	0.00	0.00	0.00
22	Forb	ERTE13	5	15	0.00	14.00	3.29	4.95
22	Forb	SOEL	5	15	0.00	0.00	0.00	0.00
32	Shrub	OPIM	5	15	0.00	7.00	3.50	3.50
34	Shrub	GUSA2	5	15	10.08	637.00	161.68	215.36
36	Tree	ACGR	5	15	0.00	1.00	0.17	0.37
36	Shrub	DAFO	5	15	0.00	2.00	0.53	0.78
36	Shrub	DALEA	5	15	0.00	0.00	0.00	0.00

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
36	Shrub	ZIGR2	5	15	0.00	0.00	0.00	0.00



Production Lbs/Acre Trends

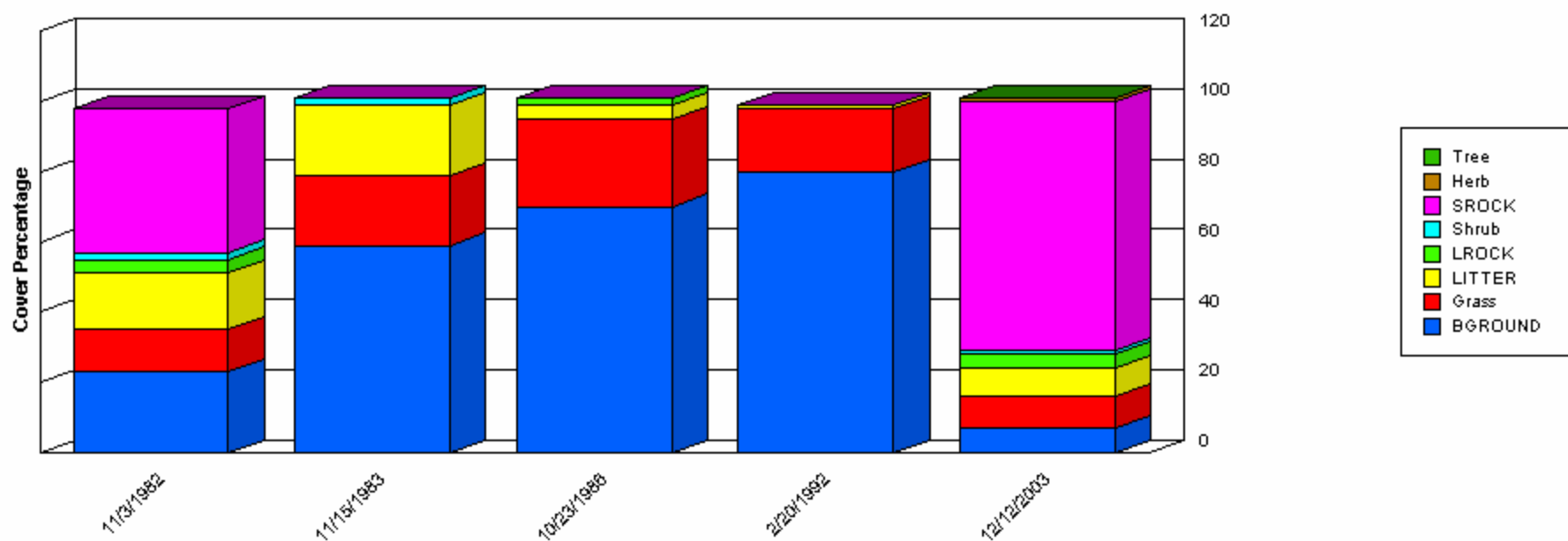


	11/3/1982	11/15/1983	10/29/1984	12/31/1985	10/23/1986	2/20/1992	12/12/2003
Forb	4.00	11.00	18.00	7.00	17.00	18.00	12.98
Grass	221.00	145.00	260.00	233.00	994.00	311.00	67.50
Shrub	82.00	67.00	637.00	127.00	56.00	0.00	11.24
Tree	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	308.00	223.00	915.00	367.00	1,067.00	329.00	91.72

Report Parameters

SITE NAME LIKE 64067-BRENDA-F202
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/3/1982	11/15/1983	10/23/1986	2/20/1992	12/12/2003
BGROUND	23.00	59.00	70.00	80.00	7.00
Grass	12.00	20.00	25.00	18.00	9.00
Herb	0.00	0.00	0.00	0.00	1.00
LITTER	16.00	20.00	4.00	1.00	8.00
LROCK	4.00	0.00	2.00	0.00	4.00
Shrub	2.00	2.00	0.00	0.00	1.00
SROCK	41.00	0.00	0.00	0.00	71.00

	11/3/1982	11/15/1983	10/23/1986	2/20/1992	12/12/2003
Tree	0.00	0.00	0.00	0.00	0.00
Total	98.00	101.00	101.00	99.00	101.00

Report Parameters

SITE NAME LIKE 64067-EAST-F204
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

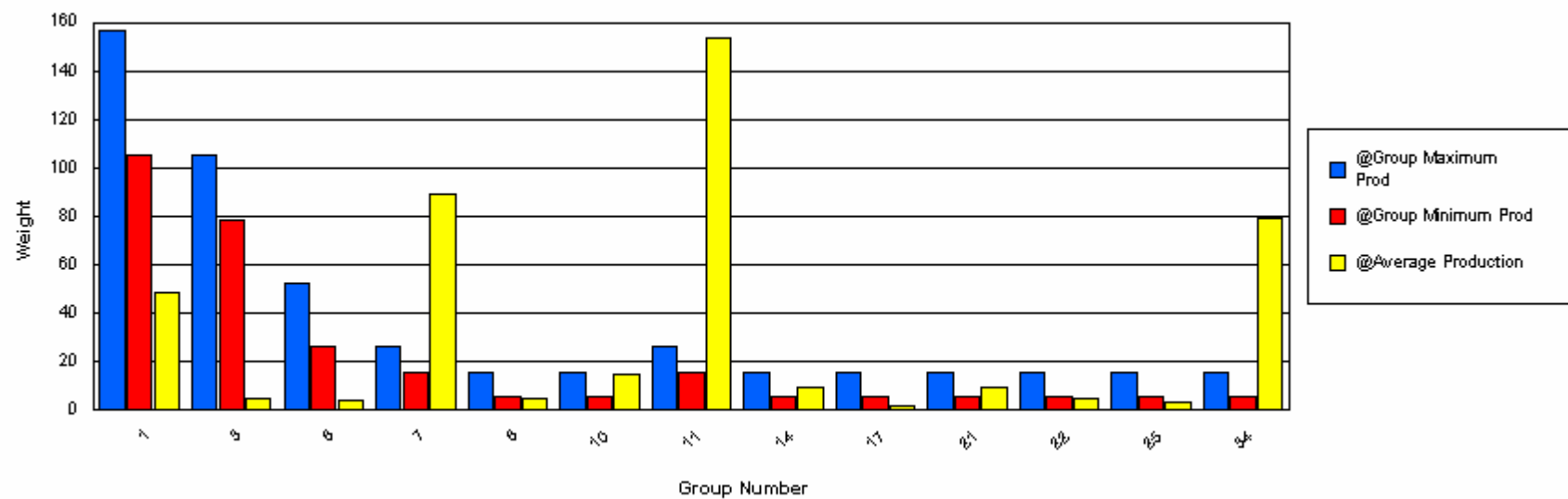
Functional / Structural Groups

Report Parameters

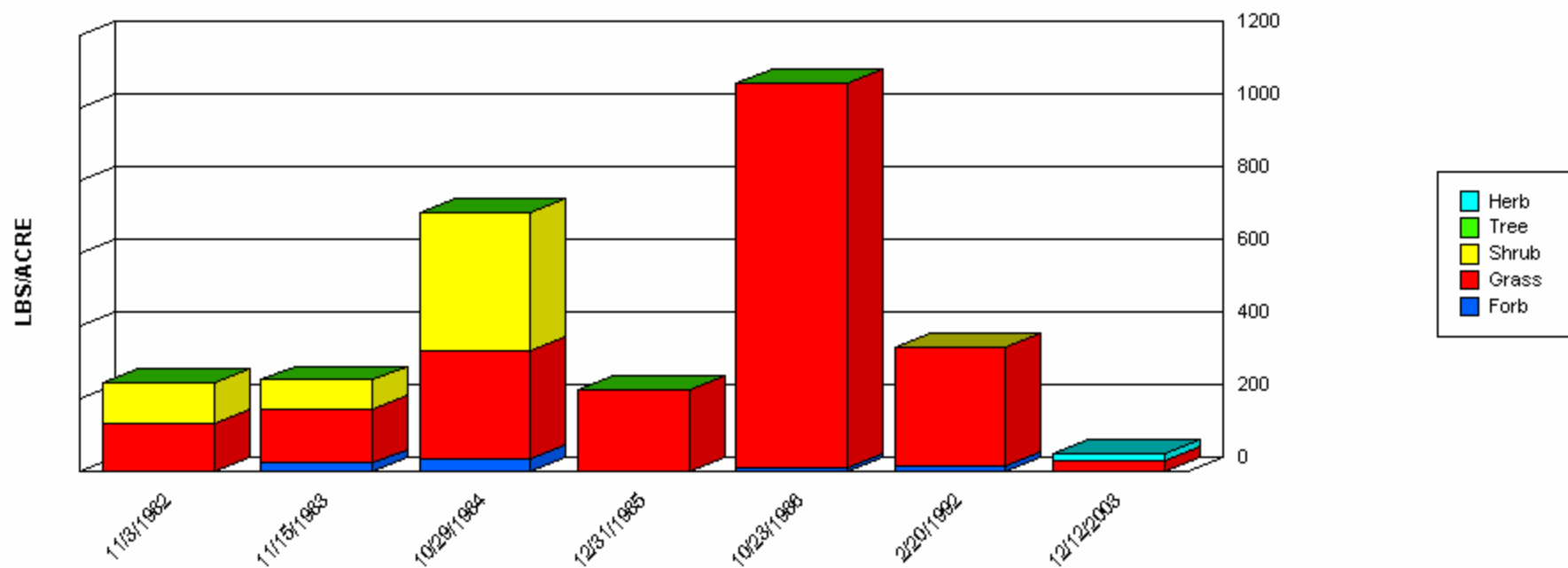
SITE NAME LIKE 64067-EAST-F204
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	1.70	136.00	48.24	42.58
3	Grass	BOGR2	78	105	0.00	14.00	4.60	5.57
6	Grass	SPCR	26	52	0.00	14.00	4.20	5.60
7	Grass	TRMU	15	26	0.61	238.00	60.94	75.39
7	Grass	TRPI2	15	26	0.00	92.00	28.17	32.53
8	Grass	MUAR	5	15	0.00	10.00	4.43	4.10
10	Grass	ERPU8	5	15	0.00	37.00	14.86	12.69
11	Grass	ARIST	15	26	0.00	308.00	59.00	102.51
11	Grass	HIMU2	15	26	9.00	171.00	62.90	56.02
11	Grass	MUAR2	15	26	0.00	32.00	14.86	9.39
11	Grass	MUHLE	15	26	0.00	4.00	1.00	1.73
11	Grass	SCBR2	15	26	3.56	54.00	15.51	16.41
14	Grass	ENDE	5	15	0.00	16.00	8.00	8.00
14	Grass	EROX	5	15	0.00	2.00	1.00	1.00
17	Forb	SPAN3	5	15	0.00	7.00	1.40	2.80
20	Forb	VERBE	10	26	0.00	1.00	0.50	0.50
21	Forb	AAFF	5	15	0.00	34.00	9.20	12.64
21	Forb	EVOLV	5	15	0.00	1.00	0.20	0.40
22	Forb	ERTE13	5	15	0.00	16.00	4.68	6.01
22	Forb	PENA	5	15	0.00	1.00	0.17	0.37
25	Shrub	LADI2	5	15	0.00	17.00	2.83	6.34
34	Shrub	GUSA2	5	15	0.00	380.00	79.43	128.35
36	Tree	ACGR	5	15	0.00	1.00	0.17	0.37

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends

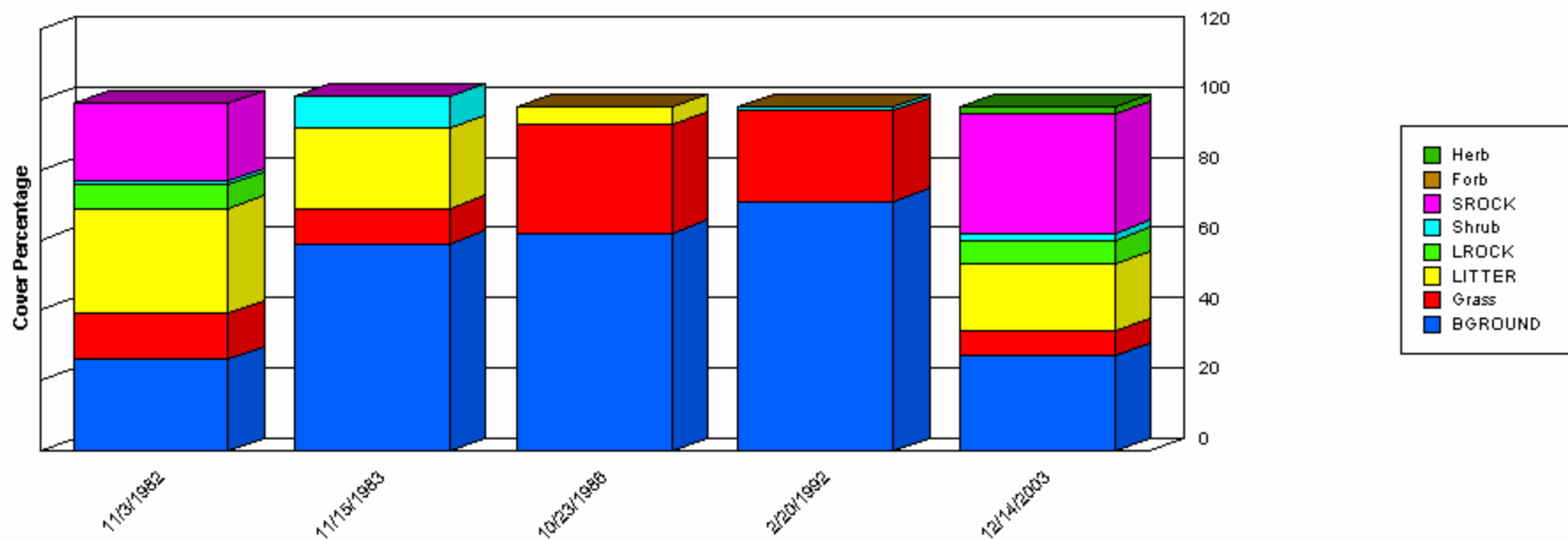


	11/3/1982	11/15/1983	10/29/1984	12/31/1985	10/23/1986	2/20/1992	12/12/2003
Forb	2.00	24.00	34.00	2.00	10.00	16.00	1.09
Grass	131.00	150.00	299.00	225.00	1,059.00	326.00	31.51
Herb	0.00	0.00	0.00	0.00	0.00	0.00	16.32
Shrub	111.00	79.00	380.00	0.00	1.00	2.00	0.00
Tree	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	245.00	253.00	713.00	227.00	1,070.00	344.00	48.92

Report Parameters

SITE NAME LIKE	64067-EAST-F204
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2004

Ground Cover Trends



	11/3/1982	11/15/1983	10/23/1986	2/20/1992	12/14/2003
BGROUND	26.00	59.00	62.00	71.00	27.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	13.00	10.00	31.00	26.00	7.00
Herb	0.00	0.00	0.00	0.00	2.00
LITTER	30.00	23.00	5.00	0.00	19.00
LROCK	7.00	0.00	0.00	0.00	7.00
Shrub	1.00	9.00	0.00	1.00	2.00

	11/3/1982	11/15/1983	10/23/1986	2/20/1992	12/14/2003
SROCK	22.00	0.00	0.00	0.00	34.00
Total	99.00	101.00	98.00	98.00	98.00

Report Parameters

SITE NAME LIKE 64067-NORTH-F203
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

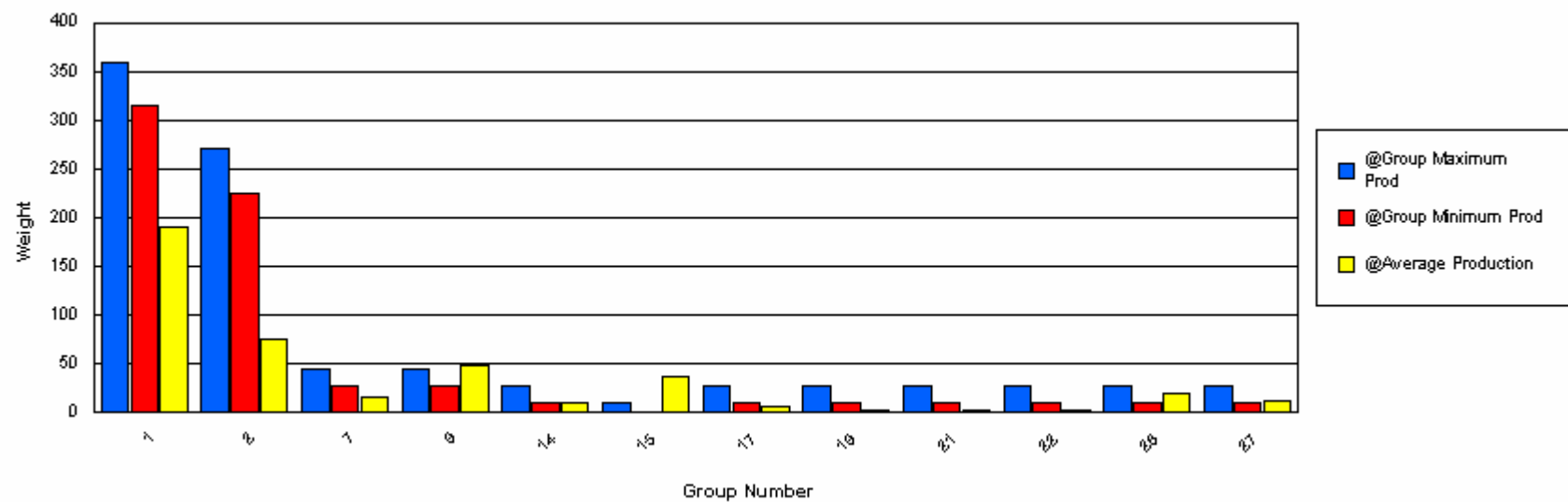
Functional / Structural Groups

Report Parameters

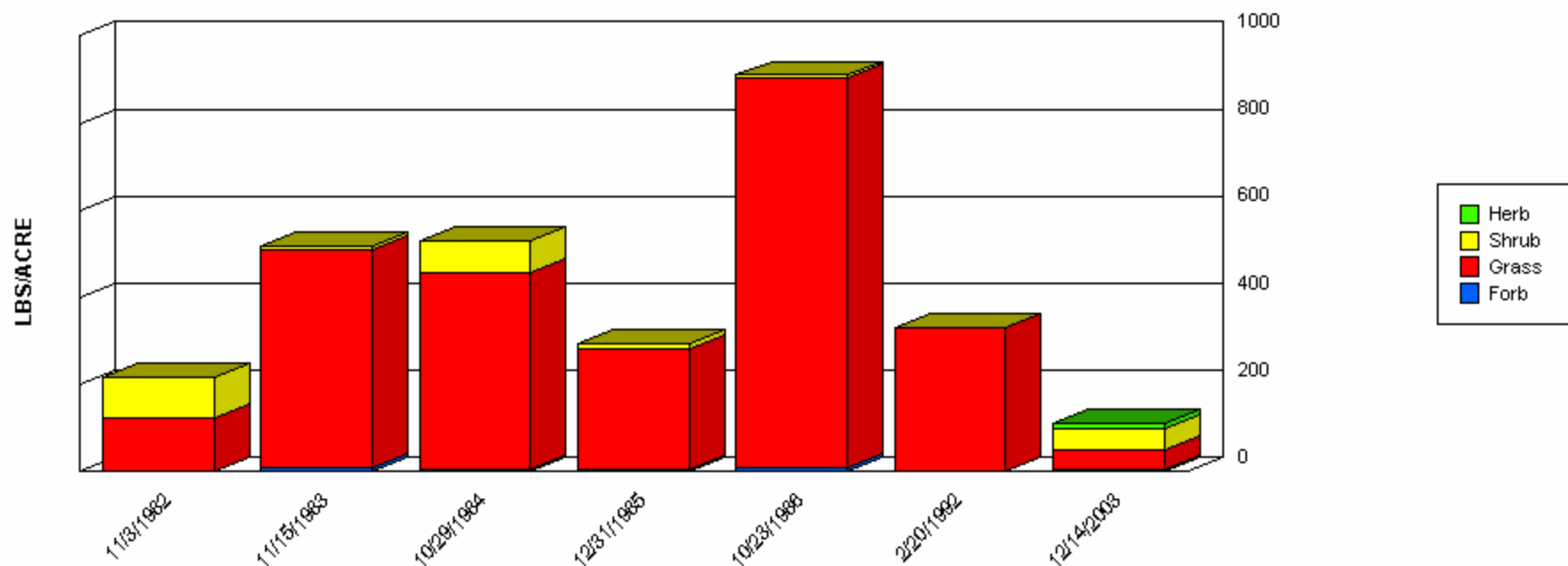
SITE NAME LIKE 64067-NORTH-F203
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	39.67	406.00	182.10	133.36
1	Grass	SCBR2	315	360	0.00	23.00	8.34	7.34
2	Grass	BOER4	225	270	1.70	126.00	67.67	44.34
2	Grass	BOGR2	225	270	0.00	26.00	7.50	10.26
7	Grass	ARIST	27	45	0.00	46.00	14.71	15.13
7	Grass	SPCR	27	45	0.00	0.00	0.00	0.00
9	Grass	MUAR	27	45	0.00	8.00	2.83	3.08
9	Grass	MUAR2	27	45	0.00	140.00	44.43	44.90
14	Grass	TRMU	9	27	0.00	25.00	9.71	9.81
15	Grass	TRPI2	0	9	0.00	111.00	36.50	40.72
17	Grass	ERPU8	9	27	0.00	21.00	5.57	6.82
18	Forb	SPAN3	9	27	0.00	0.00	0.00	0.00
18	Forb	SPHAE	9	27	0.00	0.00	0.00	0.00
19	Forb	CROTO	9	27	0.00	3.73	0.96	1.32
19	Forb	SENEC	9	27	0.00	3.00	1.00	1.41
21	Forb	ERTE13	9	27	0.00	6.00	1.67	2.05
22	Forb	AAFF	9	27	0.00	6.00	2.68	2.25
26	Shrub	GUSA2	9	27	0.00	72.00	18.00	24.98
26	Shrub	OPLE	9	27	0.00	2.00	0.67	0.94
27	Shrub	DALEA	9	27	0.00	0.00	0.00	0.00
27	Shrub	LADI2	9	27	0.00	76.00	12.43	26.09

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends



	11/3/1982	11/15/1983	10/29/1984	12/31/1985	10/23/1986	2/20/1992	12/14/2003
Forb	2.00	9.00	4.00	4.00	9.00	0.00	4.69
Grass	120.00	501.00	453.00	278.00	893.00	329.00	46.17
Herb	0.00	0.00	0.00	0.00	0.00	0.00	13.44
Shrub	94.00	8.00	72.00	14.00	8.00	1.00	46.94
Total	216.00	518.00	529.00	296.00	910.00	330.00	111.24

Report Parameters

SITE NAME LIKE 64067-NORTH-F203
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

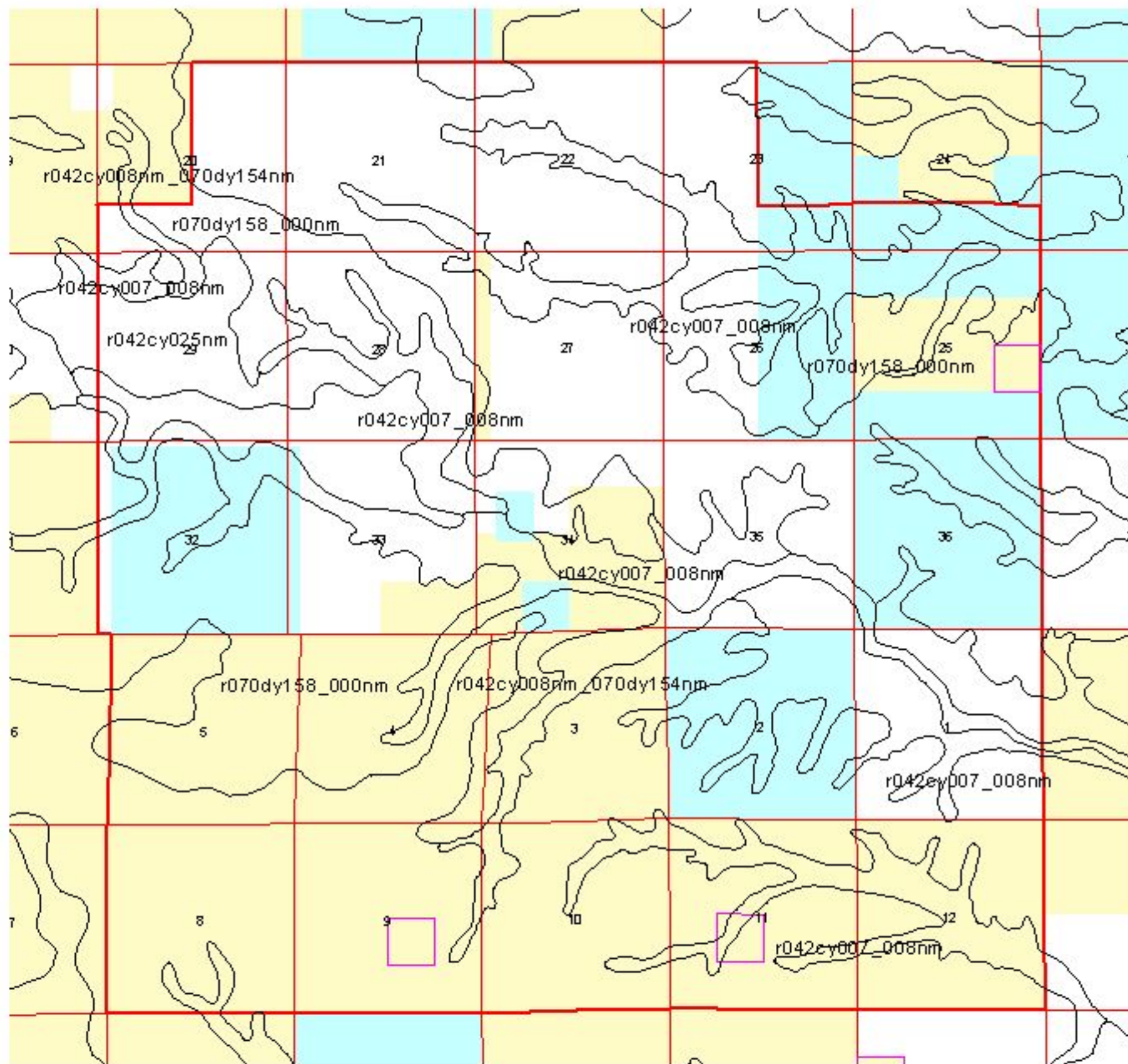


Rangeland Health Assessment Ecological Sites

Allotment 64067



T13.R22E



T14S.R23E

0.6 0 0.6 Miles



Public



State



Study Plots



Private



Study Locations



Pasture Boundary



Ecological Sites



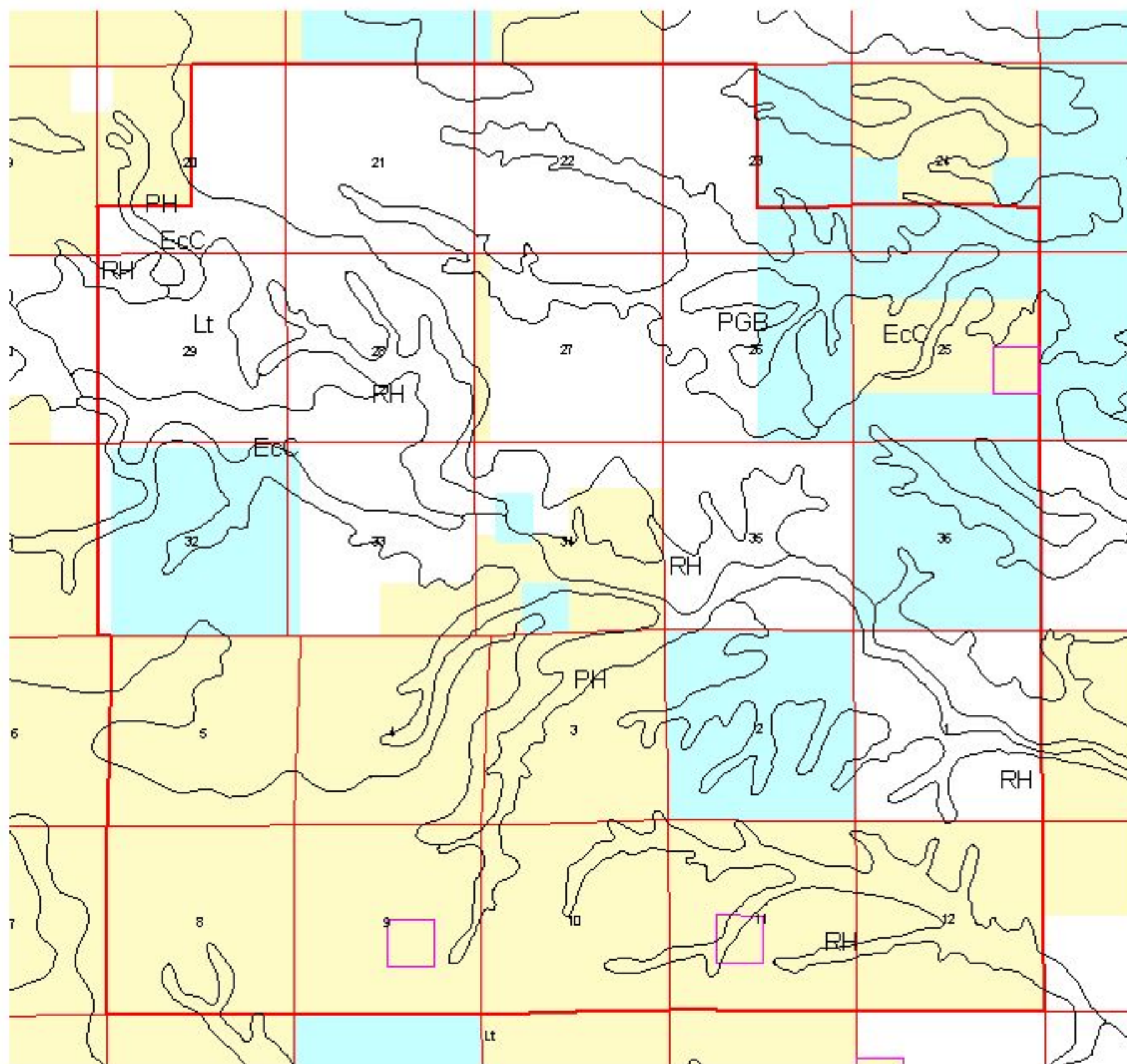
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 23, 2003.

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for use in any other application. The data are provided for informational purposes only and are not intended for use in any other application. The data are provided for informational purposes only and are not intended for use in any other application.



T13.R22E



T14S.R23E



Public



Study Plots



State



Private



Study Locations



Pasture Boundary



Soil Mapping Units



Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 23, 2003.

His laboratory is one of the few centers of Latin American research in the country, and he has developed a special interest in the role of the individual in social change, and in the role of the individual in the development of the nation. He has been a member of the National Academy of Sciences, and has been a member of the National Academy of Arts and Letters. He has been a member of the National Academy of Sciences, and has been a member of the National Academy of Arts and Letters. He has been a member of the National Academy of Sciences, and has been a member of the National Academy of Arts and Letters.